

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method for adjusting the opacity of a matrix comprising a plurality of cells, the method comprising:

receiving incident light intended for a receptor;

receiving the incident light into a beamsplitter;

refracting part of the incident light to a sensor, ~~wherein the sensor is in a first plane and the incident light is in a second plane;~~

identifying a portion of the incident light that exceeds a predetermined threshold intensity;

~~adjusting the opacity of a first plurality of cells of a matrix corresponding to the portion;~~

identifying a bright light source in the incident light;

identifying a direction of the bright light source;

identifying a direction of sight of the receptor;

determining an angle from the direction of the bright light source and the direction of sight of the receptor;

defining an active zone equivalent to a first predetermined range of angles associated with the direction of the bright light source and the direction of sight of the receptor;

defining a passive zone equivalent to a second predetermined range of angles associated with the direction of the bright light source and the direction of sight of the receptor;

determining whether the angle falls within the active zone or the passive zone; and

adjusting the opacity of at least one cell of the matrix based on the identified portion, the identified bright light source, and the determination as to whether the angle falls within the active zone or the passive zone. ~~the first plurality of cells of the matrix when the direction of sight is within an active zone, the direction of sight being with the active zone when the direction of sight approaches the bright light source.~~

2. (Original) The method of claim 1, identifying a portion of the incident light that exceeds a predetermined threshold intensity further comprising:

associating a first intensity value to the incident light; and

comparing the first intensity value to the predetermined threshold intensity.

3-10. (Cancelled)

11. (Currently Amended) A system comprising:

a light deflector to redirect incident light of an image being received by a dynamically moving receptor;

a first sensor to receive the redirected incident light, to track the intensity of the redirected incident light, and to track the direction of the image, ~~the sensor comprising a charge coupled device;~~

a second sensor to track a direction of sight of the receptor, wherein the direction of sight is a function of the dynamic movement of the receptor;

a matrix disposed between the light deflector and the receptor, ~~said~~ the matrix comprising a plurality of cells, wherein the opacity of each of the cells may selectively be adjusted; and

a controller coupled to the matrix, wherein the controller:

~~receives information about~~ the intensity of the redirected incident light information and the direction of the image information from the first sensor;

receives the direction of sight information from the second sensor;

calculates an angle formed by the direction of the image information and the direction of sight information;

defines an active zone based on a predetermined range of values of the angle;

defines a passive zone based on a predetermined range of values of the angle;

determines if the angle corresponds to the active zone or the passive zone; and

adjusts the opacity of one or more cells of the matrix based upon the intensity of the redirected incident light information and whether the angle corresponds to the active zone or the passive zone.

12. (Original) The system of claim 11, wherein the matrix comprises a plurality of two-dimensional transmissive liquid crystal display cells.

13. (Currently Amended) The system of claim 11, wherein the first sensor comprises a plurality of photoreceptor cells.

14. (Original) The system of claim 11, wherein the controller comprises a processor-based system including a software program.

15. (Original) The system of claim 11, wherein the deflector comprises a beamsplitter.

16. (Currently Amended) The system of claim 15, wherein the beamsplitter passes about 90% of the incident light while deflecting about 10% of the incident light to the first sensor.

17. (Currently Amended) The system of claim 15, wherein the beamsplitter passes about 60% of the incident light while deflecting about 40% of the incident light to the first sensor.

18. (Currently Amended) The system of claim 15, wherein the beamsplitter passes about 50% of the incident light while deflecting about 50% of the incident light to the first sensor.

19. (Cancelled)

20. (Currently Amended) The system of claim 11, wherein the first sensor comprises a charge-coupled device is located inside a camera body.

21. (Original) The system of claim 20, wherein the controller further includes parameter

adjustment controls.

22. (Original) The system of claim 11, further comprising an adjustable lens which receives the incident light and focuses the incident light on the matrix.

23-38. (Withdrawn)

39. (Currently Amended) ~~An article comprising a medium storing software which, when executed, causes a processor based system to~~ A method of operating a general purpose data processor of known type to enable the data processor to execute an object program, wherein the object program stores a predetermined first range and a predetermined second range, wherein the object program uses inputs from a first sensor and a second sensor, wherein the object program controls a shading matrix comprising a plurality of cells, the method comprising the steps of:

receiveing light intensity information and direction of light information from a the first sensor where the first sensor is in a plane different from and not parallel to the plane of a the shading matrix;

receiving direction of sight information from the second sensor;

measuring a third angle from the direction of light information and the direction of sight information;

defining an active zone based on the predetermined first range;

defining a passive zone based on the predetermined second range;
determining whether the third angle is within the active or passive zone;
comparing the light intensity information to a predetermined threshold intensity value;
and
adjusting the opacity of one or more cells of the shading matrix based on the light
intensity information as compared to the predetermined threshold intensity value and whether
the third angle is within the active or passive zone.

40-42. (Cancelled)

43-50. (Withdrawn)

51. (Currently Amended) A method for dynamic optical filtration of a matrix, said matrix
comprising a plurality of cells, said method comprising:

identifying a source of bright light in incident light, said incident light to be received by
a receptor wherein a direction of sight is associated with said receptor;

~~redirecting a portion of said incident light to a sensor;~~

determining ~~the~~ an angle between said source of bright light and ~~the~~ said direction of
sight ~~of the receptor;~~

defining an active zone range and passive zone range for said angle;

determining whether said angle is in said active zone or said passive zone; and

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adjusting the opacity of at least one cell in a ~~shading~~ the matrix based ~~on said angle~~
whether said angle is within said active zone or said passive zone.

52-54. (Cancelled)